



## PATENT ABSTRACTS OF JAPAN

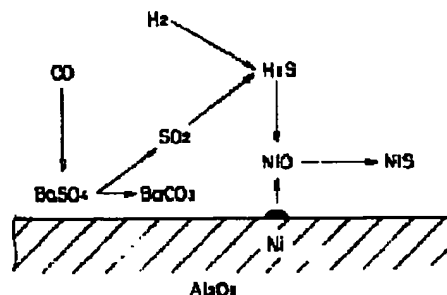
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**KOGA KAZUO****(54) EXHAUST EMISSION CONTROL DEVICE****(57) Abstract:**

**PROBLEM TO BE SOLVED:** To quickly recover the emission control capacity of an NO<sub>x</sub>-occluding reduction catalyst incorporated into an exhaust emission control device together with an upstream three-way catalyst.

**SOLUTION:** An NO<sub>x</sub>-occluding reduction catalyst carries Ni as a catalyzer on its alumina-carrying layer. When the engine is operated in a rich air-fuel ratio range, a reducing atmosphere is produced about the NO<sub>x</sub> catalyst, which atmosphere triggers a reaction of converting NiO into NiS with consumption of H<sub>2</sub>S. Such consumption in turn promotes consumption of SO<sub>2</sub> and a reaction of converting BaSO<sub>4</sub> or a sulfur oxide depositing on the NO<sub>x</sub> catalyst into BaCO<sub>3</sub> or an NO<sub>x</sub> occluding agent in an oxidizing atmosphere thereby recovering the emission control capacity of the NO<sub>x</sub> catalyst.



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